Remarks

The Examiner has rejected independent claim 1 under 35 U.S.C. 35 U.S.C. §103 as obvious over JP 61-20015 to Takahashi ("Takahashi '015) at the time of the invention in view of U.S. Patent No. 5,743,846 to Takahashi ("Takahashi '846"). This rejection is respectfully traversed.

Novelty

As acknowledged by the Examiner, Takahashi '015 does not anticipate independent claim 1 because all of the elements in claim 1 are not shown in this reference. Specifically, Takahashi '015 does not disclose at least the following:

- First, as noted by the Examiner, Takahashi '015 does not disclose a center rod lens that is essentially the same length as, or longer than, each of the outer rod lenses.

- Second, contrary to the statement in the Office Action, Applicant respectfully notes that Takahashi '015 does not disclose rod lenses that are vertex-to-vertex. Instead, the vertices of the center and outer rod lenses are specifically distanced from each other. The Office Action states that the center lens (7) and outer lenses (5, 6) "are arranged in a vertex-to-vertex adjacent configuration to one another without any distancing tubes located between the rod lens elements." Applicant respectfully notes that the fact that a distancing tube is not depicted

does not mean that the lenses are positioned vertex-to-vertex, as the figures are simply illustrating the arrangement of the lenses alone. The center and outer lenses are specifically positioned with distances d2 and d6 between them, as illustrated in each of Figures 3-8 and defined in the lens data (d2, d6) for each embodiment described.

Obviousness

Additionally, the present invention is not obvious over Takahashi '015 in view of Takahashi '846, as there is no suggestion for one skilled in the art to make the modifications to Takahashi '015 that are necessary in order to arrive at the present invention. *See, e.g.,* MPEP 2143.01 ("The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.").

Applicant respectfully points out that the use of a center rod lens that is at least about as long as the outer rod lenses, and the placement of these lenses vertex-to-vertex, are fundamental, inventive aspects of the presently claimed invention, as explained in the background section of the present application. *See* Paragraphs 0015, 0018, and 0019. As explained therein, employing a center rod lens that is at least about as long as the outer rod lenses results in an advance over the prior art designs in that the numerical aperture is enlarged, which allows passage of a greater number of rays,

thereby increasing image brightness, and placing these lenses vertex-to-vertex allows one to dispense with distancing tubes, thereby reducing the cross section.

Applicant respectfully notes that Takahashi '015 clearly did not contemplate employing such features, and Takahashi '846 would not suggest to one skilled in the art that it would be desirable to modify Takahashi '015 in these ways. It is, of course, well settled that the mere fact that references *are capable of being* combined or modified does not render a resultant combination or modification obvious *unless the prior art also suggests the desirability of the combination or modification*. *In re Mills*, 916 F.2d 680, 682, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990) (Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so" in order for obviousness to exist). Here, Takahashi '846 would not have suggested to one skilled in the art that it would be desirable to modify the center rod lens of Takahashi '015 to make it at least as long as the outer lenses in order to enlarge the numerical aperture and thereby increase image brightness. As noted in the Office Action itself, the embodiments in Takahashi '846 that describe a center lens with a length approximately equal to the outer lenses are simply a few embodiments among many that are described in Takahashi '846, which employ center lenses of all different sizes. The presence of a few examples of this length center rod does constitute an expression of the desirability of this length specifically, especially when it describes so many examples using smaller lengths, and it would

certainly not have taught those skilled in the art that they should modify the lenses in Takahashi '015 in this way.

Applicant notes that, when combining references, it is not appropriate to simply pick and chose different elements appearing in different references. In other words, the fact that a missing element may appear in Takahashi '846 is not an appropriate basis for an obviousness rejection. Rather, the relevant inquiry is whether Takahashi '846 would provide a suggestion or motivation to modify Takahashi '015—namely, whether it would suggest to change the length of the center rod lens taught in Takahashi '015. *In re Oetiker*, 977 F.2d, 1443, 1447 (Fed. Cir. 1992) ("There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination."). This suggestion must be a motivation that would have been provided by the prior art, without the teachings of the present application. *Id.* ("That knowledge can not come from the applicant's invention itself."). *See also In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991) (suggestion to combine must be found in the prior art, not the applicant's disclosure). Here, Takahashi '846 provides no suggestion to modify the rod length of Takahashi '015. Instead, Applicant respectfully submits that the Office Action unfairly attempts to use the prior art to piece together the claimed invention in a way that the prior art clearly would not teach one skilled in the art to do.

Applicant submits that it is not appropriate to try to piece together a claimed invention, using the Applicant's disclosure as a roadmap, in this fashion. As the Court of Appeals for the Federal Circuit has recently reaffirmed and explained:

> [I]n making the assessment of differences between the prior art and the claimed subject matter, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed.Cir.1983) (noting that "virtually all [inventions] are combinations of old elements"). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might successfully break an invention into its component parts, then find a prior art reference corresponding to each component. *This line of reasoning would import hindsight into the obviousness determination by using the invention as a roadmap to find its prior art components. Further, this improper method would discount the value of combining various existing features or principles in a new way to achieve a new result--often the essence of invention.*

Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1337, 75 U.S.P.Q.2d 1051, 1054 (Fed. Cir. 2005) (citations omitted) (emphasis added).

Similarly, Takahashi '846 provides no suggestion to alter the lens arrangement in Takahashi '015 to place the lenses vertex-to-vertex. Takahashi '846 teaches many, many different arrangements of lenses, and does not teach the desirability of placing the lenses vertex-to-vertex for any particular reason. Accordingly, Takahashi '846 would also not suggest to one skilled in the art to modify Takahashi '015 in this way, especially when Takahashi '015 specifically teaches to use defined distances between the rod lenses.

It is respectfully submitted that claims 1, 3, 5-9, 11-14 and 16-17, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.

Respectfully submitted,

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